B.B.M.P

BRUHAT BENGALURU MAHANAGARA PALIKE

YELAHANKA ZONE

DIVISION: BYATARAYANAPURA

SUB DIVISION: KODIGEHALLI

Name of Work: **Estimate for Improvements to Roads, Drains and Construction of Culverts at Maruthi Layout, Bhuvaneshwarinagara and Surrounding in Ward No. 09.**

Estimated Cost Rs. 55.00 Lakhs

BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK:- Improvements to Roads, Drains and Construction of Culverts at Maruthi Layout, Bhuvaneshwarinagara and Surrounding in Ward No. 09.

Estimation Cost.Rs 5500000.00

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
1	Earth work Excavation by manual means for drains,canals, waste weir, draft, approach channels, key trenches, foundation of bridges and such simillar works in all kinds of soils , as per drawing and technical specifications, including setting out, shoring, strutting, barricading, caution lights, removal of stumps and other deleterious matter, excavated surface leveled and sides neatly dressed disposing off the excavated stuff or sorting & stacking the selected stuff for reuse in a radius of 50 m and lift upto 1.5 m including cost of labour, tools & other appurtenaces required to complete the work. **(PWD SR 2021-22 Vol -I Pg No 5 item no 1.4.1)**	Cum							
	New Drain								
	Maruthinagara Main Road		2	218.00	1.00	1.00	436.00		
	Culvert								
			12	6.00	2.00	1.20	172.80		
	Basic rate	186.00							
	Area weightage 10%	18.60							
	Sub Total	204.60							
	Total						**608.80**	204.60	**124560.00**
2	Providing and laying in position Plain Cement Concrete Mix 1:3:6 (M10) for levelling course for all works in foundation. Using 40 mm nominal size graded crushed coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. **(PWD SR 2021-22 Vol -I Pg 15 item no 2.1.3)**	Cum							
	New Drain								
	Maruthinagara Main Road		2	218.00	0.90	0.15	58.86		
	Culvert								
			12	6.00	1.80	0.15	19.44		
	Issued Rate 07-07-2022 Basic rate	5554.00							
	Area weightage 10%	555.40							
	Sub Total	6109.40							
	Total						**78.30**	6109.40	**478366.00**

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
3	Providing Size Stone masonry with hard stone in foundation & plinth with Cement mortar 1:6 (1 cement : 6 coarse sand) **Item No. 5.4, Page No. 9, Vol - II PWD SR 2021-22**	Cum							
	Culvert								
	SSM Wall								
	First Course								
			2x12	6.00	0.60	0.45	38.88		
	Second Course								
			2x12	6.00	0.45	0.45	29.16		
	Basic rate	5422.00							
	Area weightage 10%	542.20							
	Sub Total	**5964.20**							
	Total						**68.04**	5964.20	**405804.00**
4	Providing ruled pointing to cursed stone masonry with lime mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost all materials, labour, usage charges of machinery, curing complete as pre specification. **Item No. 21.10 Page No. 190, Vol - II PWD SR 2021-22**	Sqm							
	Pointing		2x12	6.00		0.90	129.60		
	Basic rate	238.00							
	Area weightage 10%	23.80							
	Sub Total	**261.80**							
	Total						**129.60**	261.80	**33929.00**
5	Providing and laying in position Reinforced cement concrete for all Sub structures of building, Irrigation works, Sub structure works of bridges, Drain works & other parallel works from 0.50m to 3.50 m height. The granite/trap/basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed with super plasticisers, laid in layers, well compacted using needle vibrators, providing weep holes wherever necesary, including all lead & lifts, cost of all materials of quality, confirming to the requirements of relevant IS codes, labour, Usage charges of machinery, curing and all other appurtenances required to complete the work as per technical specifications. M20 (The cost of steel reinforcement & formwork to be paid separately) **(PWD SR 2021-22 Vol -I Pg 17 item no 2.4.2))**	Cum							
	New Drain								
	Raft								
	Maruthi nagara Main Road		2	218.00	0.90	0.15	58.86		
	Side Wall								
	Maruthi nagara Main Road		2x2	218.00	0.15	0.60	78.48		

Sl No	Description of work	Unit	Mesurement				Qty.	Rate	Amount
			No.	L	B	D			
	Issued Rate 07-07-2022 Basic rate	5968.00							
	Add 5% for Shuttering	298.40							
		6266.40							
	Area weightage 10%	626.64							
	Sub Total	**6893.04**							
	Total						**137.34**	6893.04	**946690.00**
6	Supplying, Fitting and Placing un-coated TMT bar Reinforcement in sub-structure complete as per Drawing and Technical Specifications. MORTH Specification NO.1600&2200 **(PWD SR 2021-22 Vol - III P. 88 item no. 13.1)**								
	For Drain	Cum					137.34		
		kg	Steel assumed 60Kg/Cum of Concrete				0.06		
		tonne					**8.24**		
	Issued Rate 07-07-2022 Basic rate	92170.00							
	Area weightage 10%	9217.00							
	Sub Total	**101387.00**							
	Total						**8.24**	101387.00	**835469.00**
7	Providing and laying in position plain cement concrete for levelling course for all works in foundation. The granite / trap / basalt crushed graded coarse aggregates and fine aggregates as per relevant IS Codes machine mixed, laid in layers not exceeding 150 mm thickness, well compacted using plate vibrators, including all lead & lifts, cost of all materials of quality, labour, Usage charges of machineries, curing, and all the other appurtenances required to complete the work as per technical specifications. (The cost of steel reinforcement & formwork shall be paid separately **Mix 1:3:6 (M10) Using 20 mm nominal size graded crushed coarse aggregate (PWD SR 2021-22 Vol - I Pg 15 item no 2.1.4))**	Cum							
	Vent Concrete								
			12	6.00	1.50	0.10	10.80		
	Ramp								
			2x12	6.00	1.00	0.15	21.60		
	Issued Rate 07-07-2022 Basic rate	5728.00							
	Area weightage 10%	572.80							
	Sub Total	6300.80							
	Total						**32.40**	6300.80	**204146.00**
8	Providing and Fixing pre cast Covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting, including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, copmplete. **(Approved Data Rate)**	Sqm							
	Missing Covering Slab								

Sl No	Description of work	Unit	Mesurement No.	L	B	D	Qty.	Rate	Amount
	Maruthi nagara Main Road		2	218.00	0.90		392.40		
	Data rate	2337.00							
	Total						**392.40**	2337.00	**917039.00**
9	Providing and Fixing pre cast Covering Slab 250mm thick made out of CC 1:2:4 and jelly 25mm Down size with steel reinforcement including form work,curing, including cost of all materials, labour, hire charges of machinery, loading, unloading, lead and lift, transportation etc, complete. As per Engineer incharge **(Approved Data Rate)**	Sqm							
	For Culvert								
			12	6.00	1.50		108.00		
	Data rate	5418.00							
	Total						**108.00**	5418.00	**585144.00**
10	Loading and Unloading of Stone Boulder / Stone aggregates / Sand / Kankar / Moorum. (Tipper 14 m3) **(PWD SR 2021-22 Vol-III Page No.3, Item No.1.1C)**	Cum							
	Qty Vide 90% of Item No- (1)						563.14		
	Total						**563.14**	81.40	**45840.00**
	Basic rate	74.00							
	Area Weightage 10%	7.40							
	Total	81.40							
11	Cost of Haulage Excluding Loading and Unloading Taking output 18 t load and lead 10 km = 180 t.km **(PWD SR 2021-22 Vol-III Page No.3, Item No.1.4B)**	T.Km							
	Qty frm Item No-10			563.14	1.28		720.81		
	Total						**720.81**	115.50	**83254.00**
	15Km 7*15	105.00							
	Area Weightage 10%	10.50							
	Total	115.50							
								Grand Total	**4660241.00**
								GST Charges (18% of Executed cost)	**838843.00**
								Miscellenious and rounding off	**916.00**
								Total Amount	**5500000.00**

Technical Sanction
Accorded For Rs. 55.00 Lakhs
Head of A/C.. P3726
CER NO : 107 Dt: 16/02/22

ADMINISTRATIVE APPROVAL
Accorded For Rs. Rs. 55.00 Lakhs only
Head of A/c. P3726
Div. Ref No. 49 Date 21/02/22

Rupees Fifty Five Lakh(s) Only

CERTIFICATE:

1) The work spot has been inspected and found to be necessary.
2) The work spot comes under B.B.M.P Limits.
3) The provisions made in the estimate are necessary and minimum.
4) The estimate is based on C.S.R of PWD 2018-19, 2021-22, Issue rates and Data Rates.

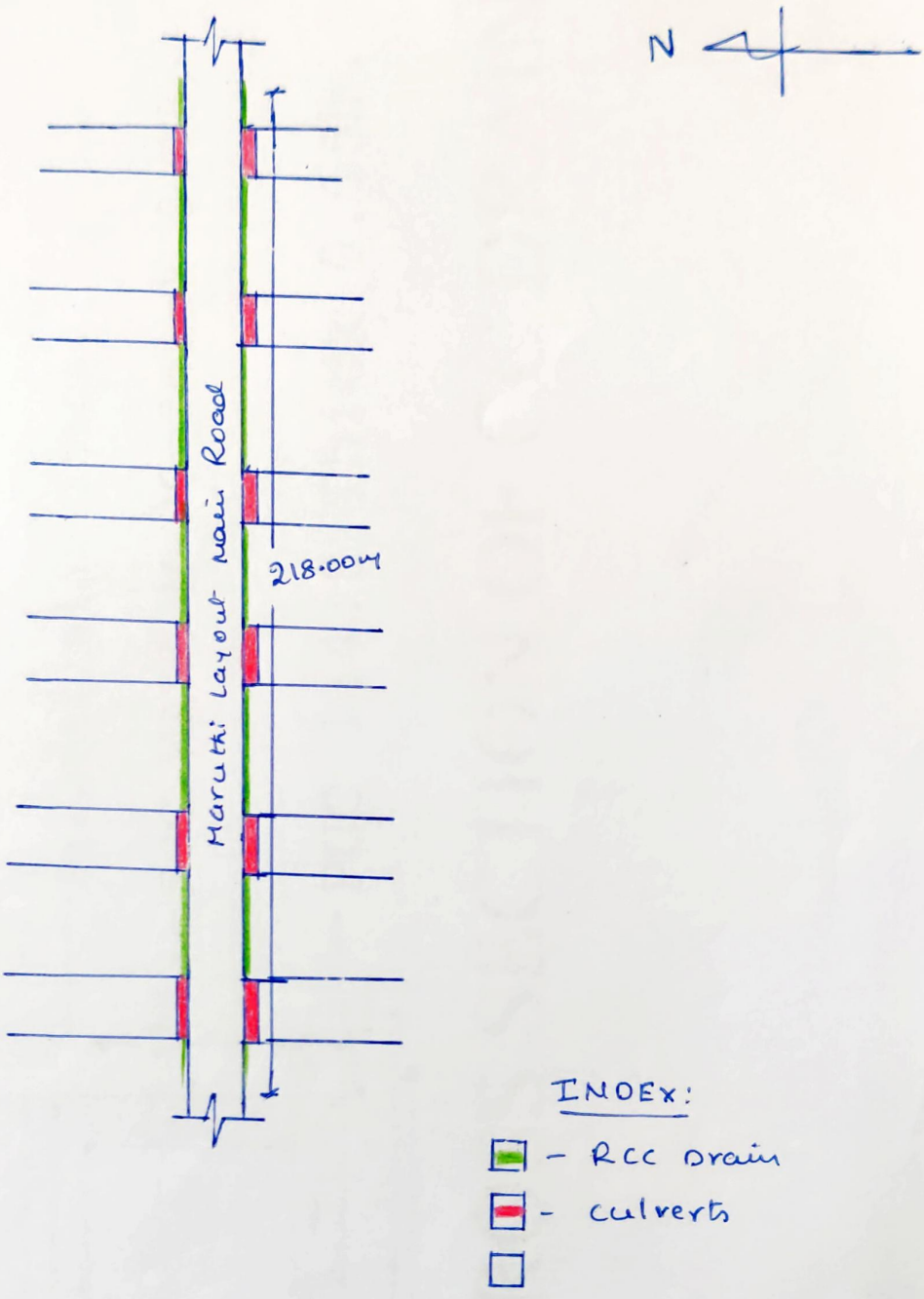
AE EE(BTP)

Assistant Engineer
Ward No. 09, Amruthahalli

Assistant Executive Engineer
Kodigehalli Sub Division

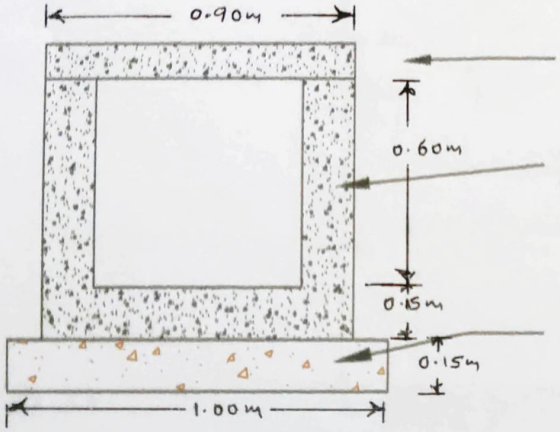
Executive Engineer
Byatarayanapura Division

Name of Work: Improvements to Roads, Drains and Construction of Culverts at Maruthi Layout, Bhuvaneshwarinagara and Surrounding in Ward No. 09.



Assistant Engineer
Ward No. 09

Assistant Executive Engineer
Kodigehalli Sub Division

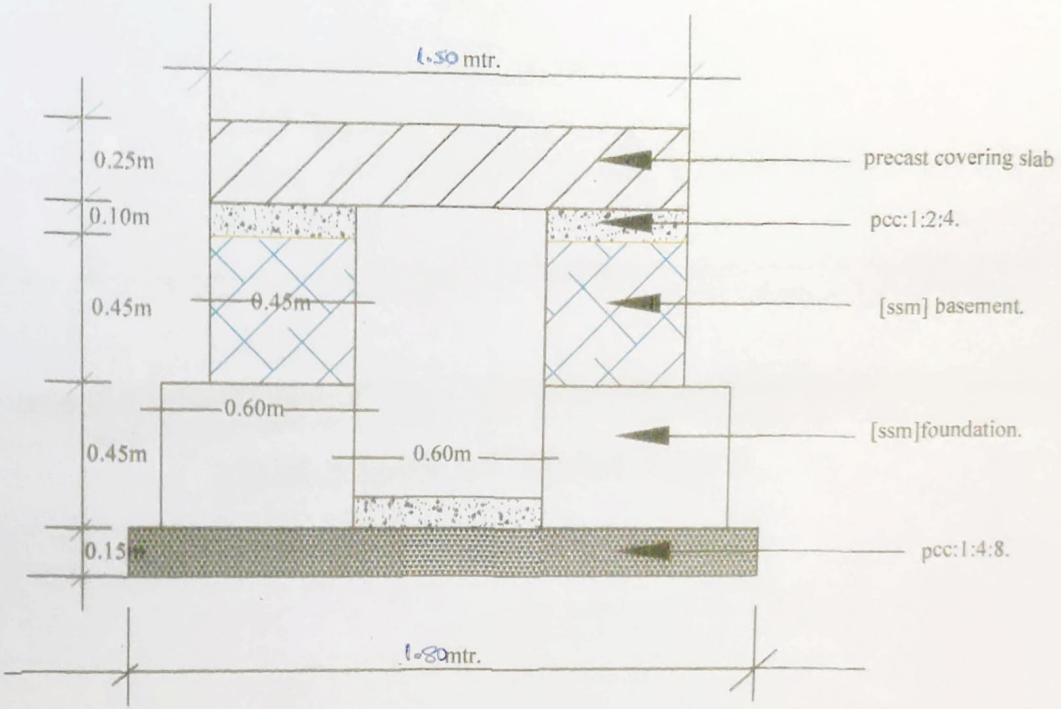


Precost slab Thick.

RCC WALL M-20 Thick 0.15.

PCC 1:4:8 Thick 0.15m.

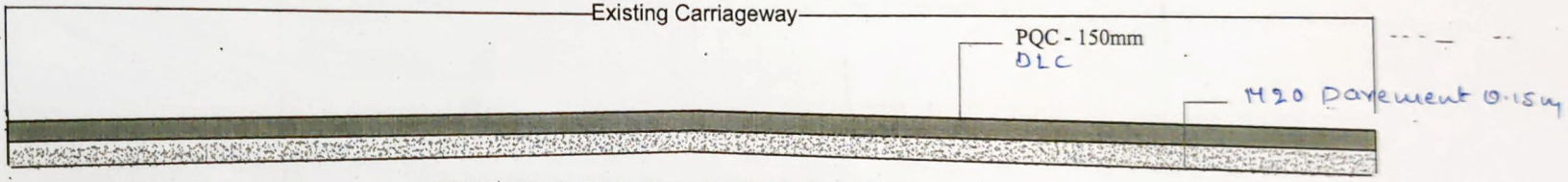
CROSS SECTION OF CC DRAIN



CROSS SECTION OF CULVERT

ASSISTANT ENGINEER.

ASSISTANT EXECUTIVE ENGINEER.



TYPICAL CROSS SECTION FOR CC ROAD